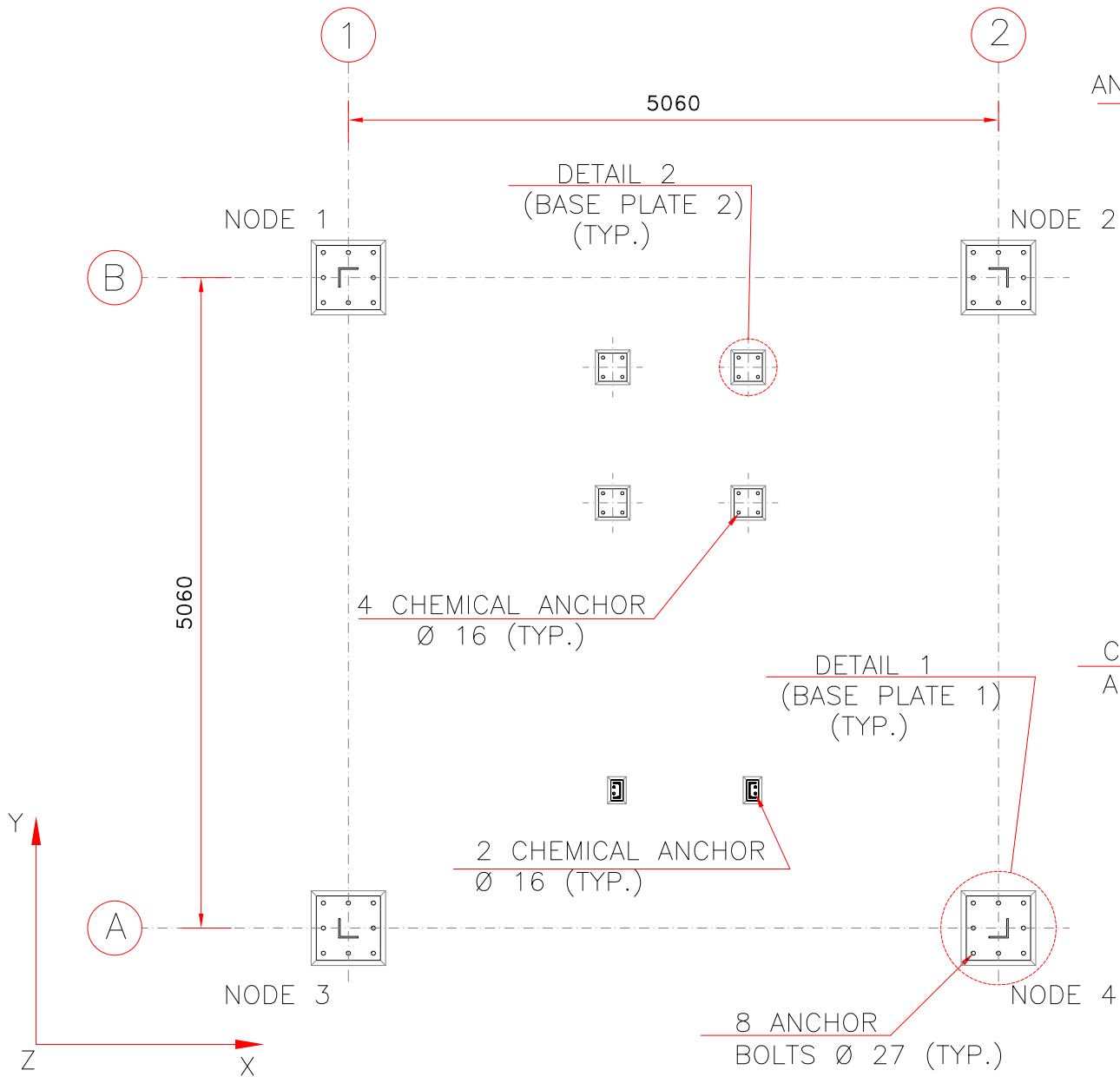


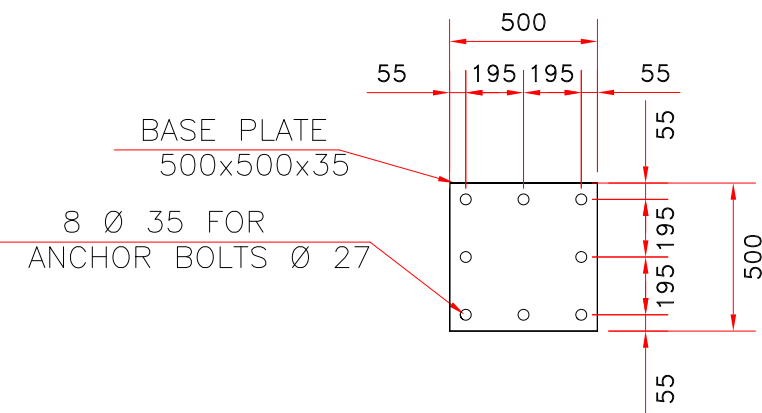
MATERIALS:

- STEEL QUALITY 275 JR
- ANCHOR BOLTS, NUTS AND WASHERS ASTM A307.
- CHEMICAL ANCHOR TYPE HILTI HVU WITH HAS ROD ADHESIVE ANCHOR SYSTEM OR SIMILAR.
- LEVELING GROUT: SIKAGRUT-212 OR SIMILAR.

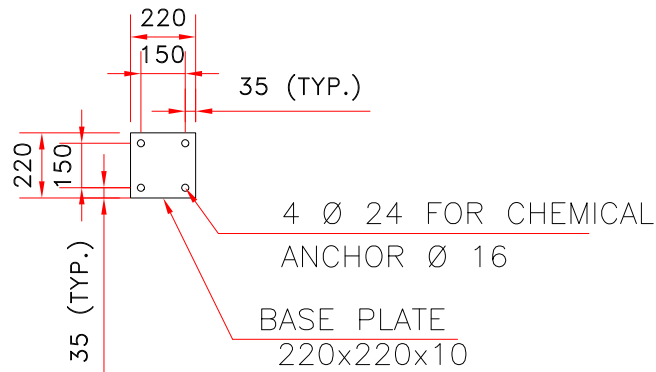


GLOBAL AXES

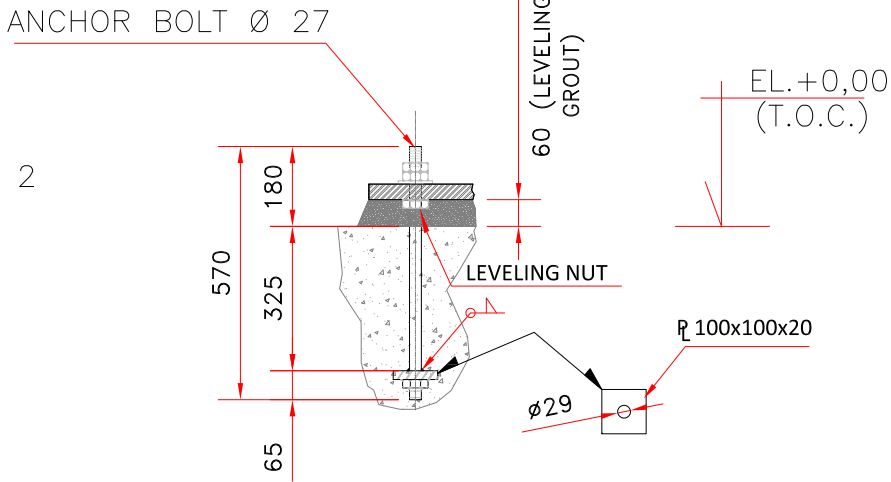
PLAN  
ESC.: 1:50



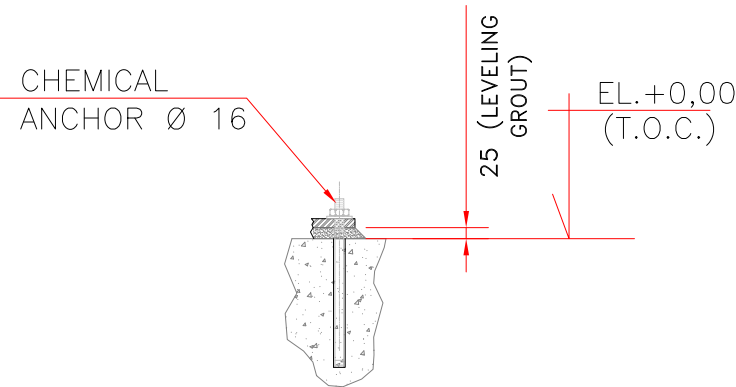
DETAIL 1  
ESC.: 1:25



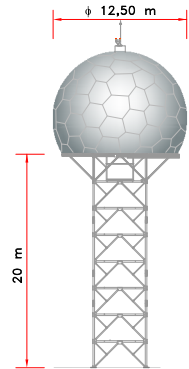
DETAIL 2  
ESC.: 1:25



ANCHOR BOLTS DETAIL  
ESC.: S/E

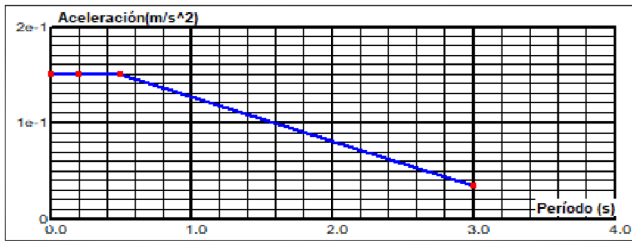


CHEMICAL ANCHOR DETAIL  
ESC.: S/E



| TABLE 1<br>PRIMARY FORCES ACTING ON<br>FOUNDATION (SEE NOTE 4) |         |         |         |
|----------------------------------------------------------------|---------|---------|---------|
| DEAD LOAD                                                      |         |         |         |
| Node                                                           | FX (kN) | FY (kN) | FZ (kN) |
| 1                                                              | -1      | 4       | -104    |
| 2                                                              | 1       | 1       | -106    |
| 3                                                              | -1      | -4      | -107    |
| 4                                                              | 1       | -1      | -103    |
| LIVE LOAD                                                      |         |         |         |
| 1                                                              | 0       | 5       | -116    |
| 2                                                              | 0       | 0       | -107    |
| 3                                                              | 0       | -5      | -119    |
| 4                                                              | 0       | 0       | -107    |
| Wind Load +X (157 km/h)                                        |         |         |         |
| 1                                                              | 24      | 0       | 205     |
| 2                                                              | 24      | 0       | -160    |
| 3                                                              | 24      | 1       | 204     |
| 4                                                              | 24      | 0       | -159    |
| Wind Load +Y (157 km/h)                                        |         |         |         |
| 1                                                              | 0       | 23      | -161    |
| 2                                                              | 0       | 23      | -153    |
| 3                                                              | 0       | 23      | 198     |
| 4                                                              | 0       | 23      | 205     |

| TABLE 2<br>SEISMIC FORCES ACTING ON THE<br>FOUNDATION (SEE NOTE 3/4) |         |         |         |
|----------------------------------------------------------------------|---------|---------|---------|
| SEISMIC FORCES +X                                                    |         |         |         |
| Node                                                                 | FX (kN) | FY (kN) | FZ (kN) |
| 1                                                                    | 16      | 0       | 126     |
| 2                                                                    | 16      | 0       | -125    |
| 3                                                                    | 16      | 0       | 126     |
| 4                                                                    | 16      | 0       | -124    |
| SEISMIC FORCES +Y                                                    |         |         |         |
| 1                                                                    | 1       | 13      | -104    |
| 2                                                                    | 0       | 14      | -106    |
| 3                                                                    | 1       | 13      | 104     |
| 4                                                                    | 0       | 14      | 106     |



DRAWING 1

NOTES:

- 1-ALL DIMENSIONS IN MILLIMETERS.
- 2-THE DESIGN OF THE FOUNDATION WILL BE MADE ACCORDING TO RECOMMENDATIONS OF THE GEOTECHNICAL STUDY.
- 3-IF THE AREA WHERE THE TOWER WILL BE INSTALLED IS A SEISMIC AREA, THE SEISMIC ACTION WILL BE DETERMINED ACCORDING TO THE INFORMATION OF THE GEOTECHNICAL STUDY. THE FORCES SHOWN IN TABLE 2 ARE BASED ON THE SPECTRUM OF RESPONSE SHOWN IN DRAWING 1.
- 4-THE DIRECTION OF THE FORCES ARE GIVEN ACCORDING TO THE GLOBAL AXES SHOWN IN PLAN.

PROMOTER:  
INDRA  
PROJECT:  
TOWER 20 m MSSR-S  
WITH RADOME (φ 12,5 m)

DETAILS OF BASE PLATES AND  
FORCES ON FOUNDATION

FORMAT: ISO A3 DATE: 07/02/2020 REV.: 00

indra